

the pivot axis Y as the second rotational axis. Each of the connection wall portions 34 has two threaded holes 34a into which the fastening screw 28 is threaded. The threaded hole 34a penetrates in a thickness direction of the connection wall portion 34 and a penetrated end thereof corresponds to a holder (not shown) for fixing the display 30. The holder has a threaded hole into which the fastening screw 28 is threaded. By threading the fastening screw 28 into the support arm portion 21a of the biaxial hinge mechanism 20 and the connection wall portion 34 of the support frame 33, the fastening screw 28 is threaded into the threaded hole of the holder. The display 30 can thus be fixed onto the support frame 33.

[0062] A fitting groove 35 is formed on an inner side of the support frame 33 by press-processing of the metal plate member (see FIG. 6). The fitting groove 35 is provided along a longitudinal direction of the connection wall portion 34. The support arm portion 21a of the connection arm 21 in the biaxial hinge mechanism 20 is fitted into the fitting groove 35. In the present embodiment, sub fitting grooves 36 along a longitudinal direction of the support frame 33 are communicatively connected to both end portions of the fitting groove 35. The sub fitting grooves 36 extend from an end portion of the fitting groove 35, in a direction orthogonal to the fitting groove 35. The holding arm portions 21b of the connection arm 21 in the biaxial hinge mechanism 20 are fitted into the sub fitting grooves 36.

[0063] Next, an assembly procedure of the present embodiment is described. First, the biaxial hinge mechanism 20 in a disassembled state shown in FIG. 6 is assembled. Then, the biaxial hinge mechanism 20 is fixed to the support frame 33 of the display unit side body 3. This fixing is realized by fitting the support arm portion 21a of the connection arm 21 into the fitting groove 35 of the support frame 33 while fitting the holding arm portions 21b into the sub fitting grooves 36 of the support frame 33. Thereafter, as shown in FIGS. 7 and 8, the fastening screws 28 are threaded from a side of the connection wall portion 34. The fastening screws 28 penetrate the threaded holes 34a of the connection wall portion 34 and the threaded holes 27 in the support arm portion 21a, and are threaded thereto. The fastening screws 28 thus realize fixing by threads in a direction orthogonal to a thickness direction of the display unit side body 3, thereby tightening together the display 30 and the biaxial hinge mechanism 20. In this case, a screw (not shown) may be threaded into the holding arm portions 21b fitted into the sub fitting grooves 36, thereby fixing side faces of the display 30. The coupling force between the connection arm 21 and the support frame 33 can thus be increased.

[0064] According to the present embodiment, the display 30, which is a component of the display unit side body 3, and the support arm portion 21a, which is the fixed portion of the biaxial hinge mechanism 20, can be tightened together by fixing by threads of the fastening screws 28 in a direction orthogonal to a thickness direction of the display unit side body 3. With such a structure of tightened together the fastening screws 28 in a direction orthogonal to a thickness direction of the display unit side body 3, the cellular telephone 1 can be provided in which the display unit side body 3 can be reduced in thickness in a thickness direction and in size.

[0065] Since the connection arm 21 of the biaxial hinge mechanism 20 is formed of a metal plate member, the biaxial

hinge mechanism 20 can be made thin while securing strength. This allows for a further reduction in thickness of the display unit side body 3.

[0066] In addition, in the biaxial hinge mechanism 20, the holding arm portions 21b extending in a longitudinal direction of the display unit side body 3 are connected to both end portions of the support arm portion 21a of the connection arm 21. The connection arm 21 has a channel shape with the holding arm portions 21b. In the connection arm 21 having a channel shape, the support arm portion 21a supports a lower end face of the display 30 and the holding arm portions 21 support both side faces of a bottom portion of the display 30. Therefore, the connection arm 21 wraps and holds the lower end portion and a peripheral portion thereof of the display 30, thereby fixing the display 30. In this case, the display 30 can be fixed without the abovementioned fastening screws 28.

[0067] In other words, when a user holds the display unit side body 3 and rotates the display unit side body 3 about the pivot axis Y with respect to the operation unit side body 2, the connection arm 21, the front case 3a, and the rear case 3b can sufficiently transfer a force.

[0068] It should be noted that a length L2 of the holding arm portions 21b (see FIG. 8) is defined so as to satisfy bending precision of the connection arm 21 and the stiffness of the support frame 33. The length L2 of the holding arm portions 21b is preferably substantially the same as a length L1 of the support arm portion 21a. In a case where the holding arm portions 21b extends in a longitudinal direction of the display 30 such that the length L2 of the holding arm portions 21b is greater than the length L1 of the support arm portion 21a, the stiffness of the support frame 33 becomes greater. On the other hand, since the bending precision of the connection arm 21 is limited, the connection arm 21 warps with respect to a surface of the display 30.

[0069] On the contrary, if the holding arm portions 21b are shaped to surround the display 30, the stiffness of the holding arm portions 21b can be secured while avoiding misalignment in an end portion thereof. However, such a shape of the holding arm portions 21b cannot be formed with a metal plate and requires processing by die casting. This may result in a negative impact on the reduction in thickness of the body and reduction in manufacturing cost of the electronic apparatus.

[0070] It should be noted that, it is a matter of course that the operation unit side body 2 may be configured as the body rotating about the pivot axis Y and the display unit side body 3 may be configured as another body.

1. A portable electronic apparatus comprising: a first body that is a substantially flat plate shape; and

a second body that is connected to the first body via a hinge portion, wherein:

the hinge portion includes a first rotational axis that makes the first body transition between an opened state and a closed state with respect to the second body, and a second rotational axis that rotates the first body with respect to the second body by way of an axis orthogonal to the first rotational axis, such hinge portion is configured by providing a fixed portion that extends in a direction orthogonal to an axial direction of the second rotational axis and rotates about the second rotational axis;

the second body is fixed to the hinge portion so as to rotate about the first rotational axis; and

the first body is fixed to the hinge portion so as to be rotatable about the second rotational axis by tightening together the fixed portion to a component constituting